



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2022-0510; Project Identifier MCAI-2022-00158-R; Amendment 39-22139; AD 2022-17-01]

RIN 2120-AA64

Airworthiness Directives; Airbus Helicopters Deutschland GmbH (AHD)

Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for certain Airbus Helicopters Deutschland GmbH (AHD) Model EC135P1, EC135P2, EC135P2+, EC135P3, EC135T1, EC135T2, EC135T2+, and EC135T3 helicopters. This AD was prompted by reports of the air conditioning system (ACS) malfunctioning. This AD requires deactivating the ACS and prohibits installing the affected parts, as specified in a European Union Aviation Safety Agency (EASA) AD, which is incorporated by reference. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For EASA material incorporated by reference (IBR) in this final rule, contact EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; telephone +49 221 8999 000; email ADs@easa.europa.eu; internet www.easa.europa.eu. You may find the EASA material on the EASA website at <https://ad.easa.europa.eu>. For Airbus Helicopters service information identified in this final rule, contact Airbus Helicopters, 2701 North Forum Drive, Grand Prairie, TX, 75052, United States; phone: (972) 641-0000 or (800) 232-0323; or at: www.airbus.com/helicopters/services/technical-support.html. You may

view this material at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N-321, Fort Worth, TX 76177. For information on the availability of this material at the FAA, call (817) 222-5110.

Examining the AD Docket

You may examine the AD docket at www.regulations.gov by searching for and locating Docket No. FAA-2022-0510; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, the EASA AD, any comments received, and other information. The address for Docket Operations is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Stephanie Sunderbruch, Aerospace Engineer, Safety Risk Management Section, Systems Policy Branch, Policy & Innovation Division, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone (817) 222-4659; email Stephanie.L.Sunderbruch@faa.gov.

SUPPLEMENTARY INFORMATION:

Background

EASA, which is the Technical Agent for the Member States of the European Union, has issued EASA AD 2022-0023, dated February 3, 2022 (EASA AD 2022-0023), to correct an unsafe condition for certain Airbus Helicopters Deutschland GmbH (AHD) (formerly Eurocopter Deutschland GmbH, Eurocopter España S.A.) Model EC135 P1, EC135 P2, EC135 P2+, EC135 P3, EC135 T1, EC135 T2, EC135 T2+, EC135 T3, EC635 T2+, EC635 P2+, EC635 P3, EC635 T1, and EC635 T3 helicopters, all variants, serial numbers (S/N) from 0008 to 0869 inclusive, except S/N 0831 and S/N 0864.

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to Airbus Helicopters Deutschland GmbH (AHD) Model EC135P1, EC135P2, EC135P2+, EC135P3, EC135T1, EC135T2, EC135T2+, and EC135T3 helicopters, S/N from 0008 to 0869 inclusive, except S/N 0831 and S/N 0864. The NPRM published in the *Federal Register* on May 10, 2022 (87 FR

27954). The NPRM was prompted by reports of the ACS malfunctioning; investigation into the malfunction has identified that certain ACS soft start units are the root cause. The NPRM proposed to require deactivating the ACS and prohibit installing the affected parts, as specified in EASA AD 2022-0023.

The FAA is issuing this AD to prevent possible overheating of the ACS. See EASA AD 2022-0023 for additional background information.

Discussion of Final Airworthiness Directive

Comments

The FAA received no comments on the NPRM or on the determination of the costs.

Conclusion

These helicopters have been approved by EASA and are approved for operation in the United States. Pursuant to the FAA's bilateral agreement with the European Union, EASA has notified the FAA about the unsafe condition described in its AD. The FAA reviewed the relevant data and determined that air safety requires adopting this AD as proposed. Accordingly, the FAA is issuing this AD to address the unsafe condition on these helicopters. However, after the NPRM was issued, the FAA determined that the unsafe condition statement was misleading in that a malfunctioning ACS would not result in reduced helicopter control. Although overheating of the ACS could result in an overvoltage of the ACS and subsequent failure of the electrical system segment connected to the ACS, there is robust separation of the system I and system II DC power buses and both systems provide electrical redundancy for flight critical systems. Any over-voltage on the system II side (which occurred for this safety issue) cannot lead to an event classified as hazardous (HAZ) or catastrophic (CAT) due to the separation of DC power supply paths and electrical redundancy. Instead, the FAA has determined that the unsafe condition could result in increased pilot workload and has revised this AD accordingly. Except for this and other minor editorial changes, this AD is adopted as proposed in the NPRM. None of the changes will increase the economic burden on any operator.

Related Service Information Under 1 CFR Part 51

EASA AD 2022-0023 requires deactivating the ACS soft start unit part number (P/N) ES59185-2 on helicopters with a compressor/condenser pallet P/N 135-0553-1 or P/N 135-0566-2 installed. EASA AD 2022-0023 also prohibits installing soft start unit P/N ES59185-2 or a compressor/condenser pallet P/N 135-0553-1 or P/N 135-0566-2 on any helicopter.

This material is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Other Related Service Information

The FAA reviewed Airbus Helicopters Alert Service Bulletin ASB EC135-21A-024, Revision 0, dated February 2, 2022. This service information specifies procedures for deactivating the soft part unit of the compressor/condenser pallet and specifies that compressor/condenser pallet P/N 135-0553-1 or 135-0566-2 with soft start unit P/N ES59185-2 installed must not be installed on any helicopter.

Interim Action

The FAA considers this AD to be an interim action. The design approval holder is currently developing a modification that will address the unsafe condition identified in this AD. Once this modification is developed, approved, and available, the FAA might consider additional rulemaking.

Differences Between this AD and the EASA AD

EASA 2022-0023 applies to Model EC635P2+, EC635P3, EC635T1, EC635T2+, and EC635T3 helicopters, whereas this AD does not because these models are not FAA type-certificated and are not included on the U.S. type certificate data sheet except where the U.S. type certificate data sheet explains that the Model EC635T2+ helicopter having serial number 0858 was converted from Model EC635T2+ to Model EC135T2+.

Costs of Compliance

The FAA estimates that this AD affects 341 helicopters of U.S. Registry. Labor rates are estimated at \$85 per work-hour. Based on these numbers, the FAA estimates the following costs to comply with this AD.

Deactivating the ACS takes about 1 work-hour, for an estimated cost of \$85 per helicopter and up to \$28,985 for the U.S. fleet.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Will not affect intrastate aviation in Alaska, and
- (3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive:

2022-17-01 Airbus Helicopters Deutschland GmbH (AHD): Amendment 39-22139;
Docket No. FAA-2022-0510; Project Identifier MCAI-2022-00158-R.

(a) Effective Date

This airworthiness directive (AD) is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to Airbus Helicopters Deutschland GmbH (AHD) Model EC135P1, EC135P2, EC135P2+, EC135P3, EC135T1, EC135T2, EC135T2+, and EC135T3 helicopters, serial numbers (S/N) from 0008 to 0869 inclusive, except S/N 0831 and S/N 0864, certificated in any category.

(d) Subject

Joint Aircraft Service Component (JASC) Code: 2100, Air Conditioning System.

(e) Unsafe Condition

This AD was prompted by reports of the air conditioning system (ACS) malfunctioning. The FAA is issuing this AD to prevent possible overheating of the ACS. The unsafe condition, if not addressed, could result in an overvoltage of the ACS, resulting in overheating of the surrounding area, failure of the helicopter electrical system connected to the ACS, and a subsequent loss of electrical power which could result in increased pilot workload.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Requirements

Except as specified in paragraphs (h) and (i) of this AD: Comply with all required

actions and compliance times specified in, and in accordance with, European Union Aviation Safety Agency (EASA) AD 2022-0023, dated February 3, 2022 (EASA AD 2022-0023).

(h) Exceptions to EASA AD 2022-0023

(1) Where EASA AD 2022-0023 requires compliance in terms of flight hours, this AD requires using hours time-in-service.

(2) Where EASA AD 2022-0023 refers to its effective date, this AD requires using the effective date of this AD.

(3) This AD does not mandate compliance with the “Remarks” section of EASA AD 2022-0023.

(i) No Reporting Requirement

Although the service information referenced in EASA AD 2022-0023 specifies to submit certain information to the manufacturer, this AD does not include that requirement.

(j) Alternative Methods of Compliance (AMOCs)

(1) The Manager, International Validation Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the International Validation Branch, send it to the attention of the person identified in paragraph (k) of this AD. Information may be emailed to: 9-AVS-AIR-730-AMOC@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(k) Related Information

For more information about this AD, contact Stephanie Sunderbruch, Aerospace Engineer, Safety Risk Management Section, Systems Policy Branch, Policy & Innovation Division, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone (817) 222-4659; email Stephanie.L.Sunderbruch@faa.gov.

(I) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.

(i) European Union Aviation Safety Agency (EASA) AD 2022-0023, dated February 3, 2022.

(ii) [Reserved]

(3) For EASA AD 2022-0023, contact EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; telephone +49 221 8999 000; email ADs@easa.europa.eu; internet www.easa.europa.eu. You may find the EASA material on the EASA website at <https://ad.easa.europa.eu>.

(4) You may view this service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N-321, Fort Worth, TX 76177. For information on the availability of this material at the FAA, call (817) 222-5110. This material may be found in the AD docket at www.regulations.gov by searching for and locating Docket No. FAA-2022-0510.

(5) You may view this material that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email fr.inspection@nara.gov, or go to: www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued on August 2, 2022.

Christina Underwood, Acting Director,
Compliance & Airworthiness Division,
Aircraft Certification Service.

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